### **SECTION 01 43 00**

# **QUALITY ASSURANCE**

# PART 1 - GENERAL

# 1.01 SECTION INCLUDES

- A. Contractor's construction quality plan.
- B. Contractor's quality control representative.

### 1.02 RELATED SECTIONS

A. Field samples and site mockups are specified in Section 01 43 38, Field Samples and Mockups.

### 1.03 MEASUREMENT AND PAYMENT

A. Separate measurement or payment will not be made for work required under this Section. All costs in connection with the work specified herein will be considered to be included with the related item of work in the Bid Schedule of the Bid Form, or incidental to the Work.

### 1.04 SUBMITTALS

- A. Construction Quality Plan: Submit the Contractor's proposed Construction Quality Plan not later than 14 Days after the effective date of the Notice to Proceed. The Contractor's Construction Quality Plan will be reviewed by the Engineer, who will provide comments to the Contractor within 20 Days after its submittal. The Contractor shall revise its plan in accordance with the review comments and resubmit as required. The Contractor shall perform the Work in accordance with the approved plan.
  - 1. In the event that the Contractor chooses to schedule activities prior to the approval of the Construction Quality Plan, the Contractor shall submit interim Quality Plans for such activities to the Engineer for approval. The activities addressed in such Quality Plans may not be started until the appropriate Quality Plan has been approved by the Engineer. Such plans shall be incorporated later into the overall Construction Quality Plan.
- B. Construction Quality Control Representative: Submit to the Engineer for approval, within ten Days after the effective date of the Notice to Proceed, the name, qualifications, experience, and resume of the contractor's proposed Construction Quality Representative as specified in Article 1.06 herein.
- C. Quality Control Testing Firm: The Contractor shall submit the name, address, and qualification, together with the scope of proposed services, of the proposed testing firm to the Engineer for approval as least 30 Days prior to the scheduled commencement of any work involving such testing. Should the Contractor desire to

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use more than one firm for quality control testing, the required information shall be submitted for each such proposed firm.

### 1.05 CONTRACTOR'S CONTRUCTION QUILITY PLAN

- A. The Contractor shall prepare a Construction Quality Plan which shall identify the Contract quality requirements for each activity and describe how the Contractor intends to furnish that quality, including control testing, certification, and records which the Contractor intends to provide.
- B. The Construction Quality Plan shall include, but not be limited to, the following elements:
  - 1. Training of personnel;
  - 2. Installation, inspection, examination, and test control;
  - 3. Control of measuring and test equipment;
  - 4. Material control;
  - 5. Control of non-conforming items;
  - 6. Subcontractor controls:
  - 7. Supplier and vendor controls:
  - 8. Documentation and records control:
  - 9. Special process control, and
  - 10. Facility turnover.
  - 11. Test Program Plan.
- C. Test Program Plan:
  - 1. A Test Program Plan shall be prepared, identifying the approach for accomplishing each of the specified tests. A narrative shall be prepared for each test specified, describing the test set-up, equipment, and instrumentation that will be used; procedure to be implemented; and the anticipated, as well as acceptable, test results. Drawings showing the relationship of the test sample and all significant components of the test equipment shall be included, as necessary, to describe the test set-up and procedure. The Test Program Plan shall include the test sequencing.
  - 2. Equipment specifications and calibration methods for all testing equipment shall be included in the Test Program Plan.
  - 3. Identity and qualifications of personnel who will perform testing shall be included in the Test Program Plan.

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- 4. The Test Program Plan shall include the proposed format for reporting test data.
- 5. The projected schedule for test procedure submittals, test executions, and test results report submittals shall be included in the Test Program Plan.
- 6. After approval of the Test Program Plan, any proposed changes will require approval of the Engineer prior to implementing the change.

### 1.06 CONTRACTOR'S QUALITY CONTROL REPESENTIVE

- A. The Contractor shall assign a Quality Control Representative to monitor the quality of construction activities.
- B. In addition to persons performing or directly supervising the Work, the Contractor shall use qualified persons for quality verification and audits. These employees shall not be part of the production staff nor subject to the authority of the production staff, and shall have the necessary authority to perform their roles effectively.
- C. The Contractor shall define the responsibility and authority of personnel primarily responsible for performing quality verification and audits. Include responsibility and authority to perform the following:
  - 1. Identify and record nonconforming items or conditions;
  - 2. Initiate and recommend correction through appropriate channels;
  - 3. Verify correction or implementation of solutions to correct nonconforming items or conditions; and
  - 4. Prevent or control further nonconformance.

## **PART 2 - PRODUCTS**

Not Used

### PART 3 - EXECUTION

Not Used

END OF SECTION 01 43 00